



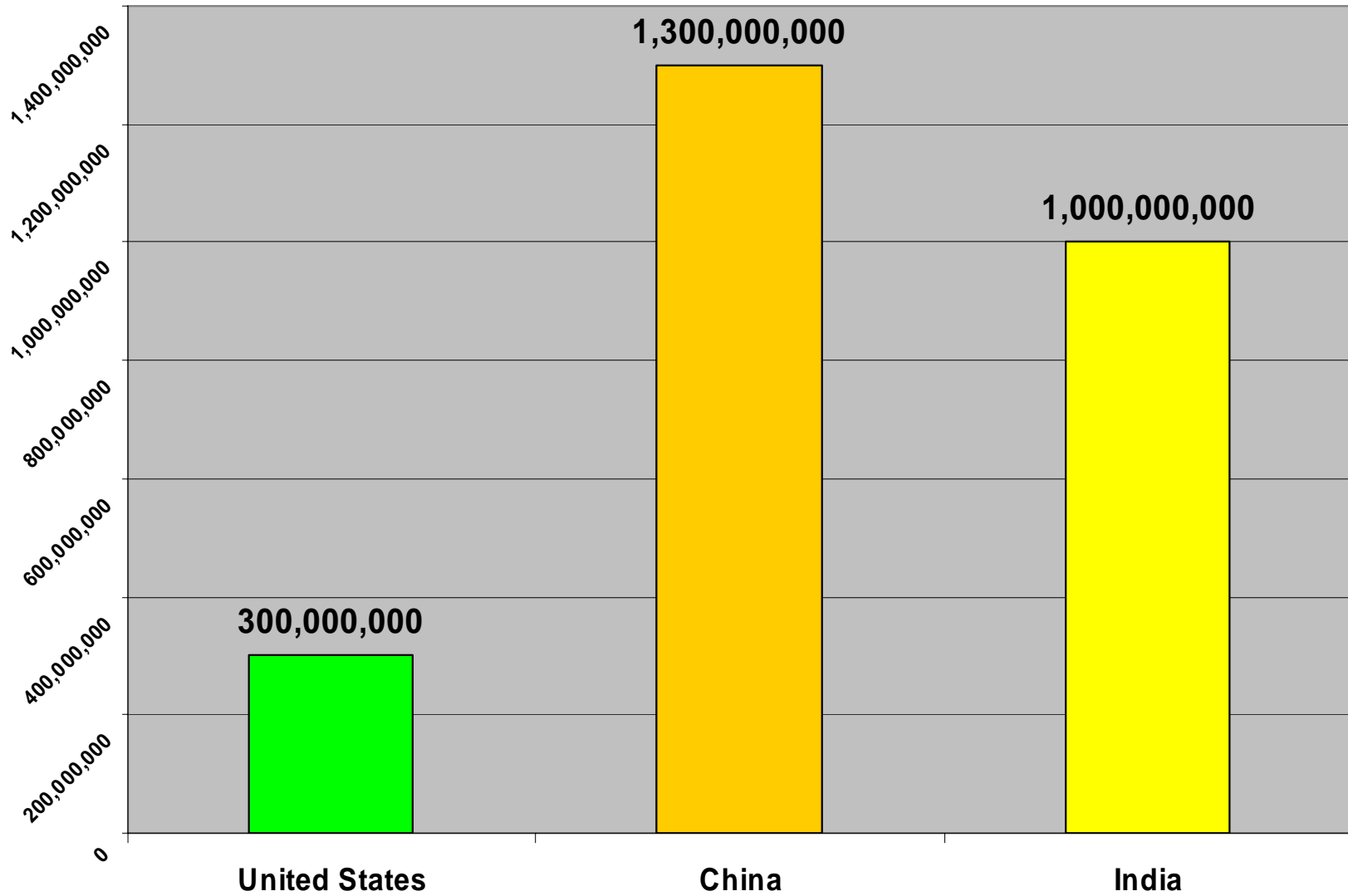
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High School

All of the headlines are about China and India...
(estimated populations)



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■ United States ■ China ■ India

Business Week, May 22, 2006



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Mexico Pumping Out Engineers

*The headlines are about low-wage illegals,
but Mexico is swiftly upgrading its workforce*

Mexico: Pumping Out Engineers



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Business Week, May 22, 2006

- **There are currently 451,000 full-time engineering undergraduates in Mexico** compared to 370,000 full-time in the U.S.
- **GE Aviation and Engineering** is hiring 200 engineers in Mexico City this year.
- **Honeywell Aerospace** is building a \$40 million research facility in Mexico hiring 300 engineers.

Of 100 9th Graders



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- About 75 will graduate on time
- About 35 will enroll in Postsecondary
- About half of that 35 must enroll in developmental classes in English and/or math
- About 16 will graduate in 150% of required time

What Have We Learned?

**Ready for College = Ready for
Workforce Training**

Ready for College = Ready for Workforce Training



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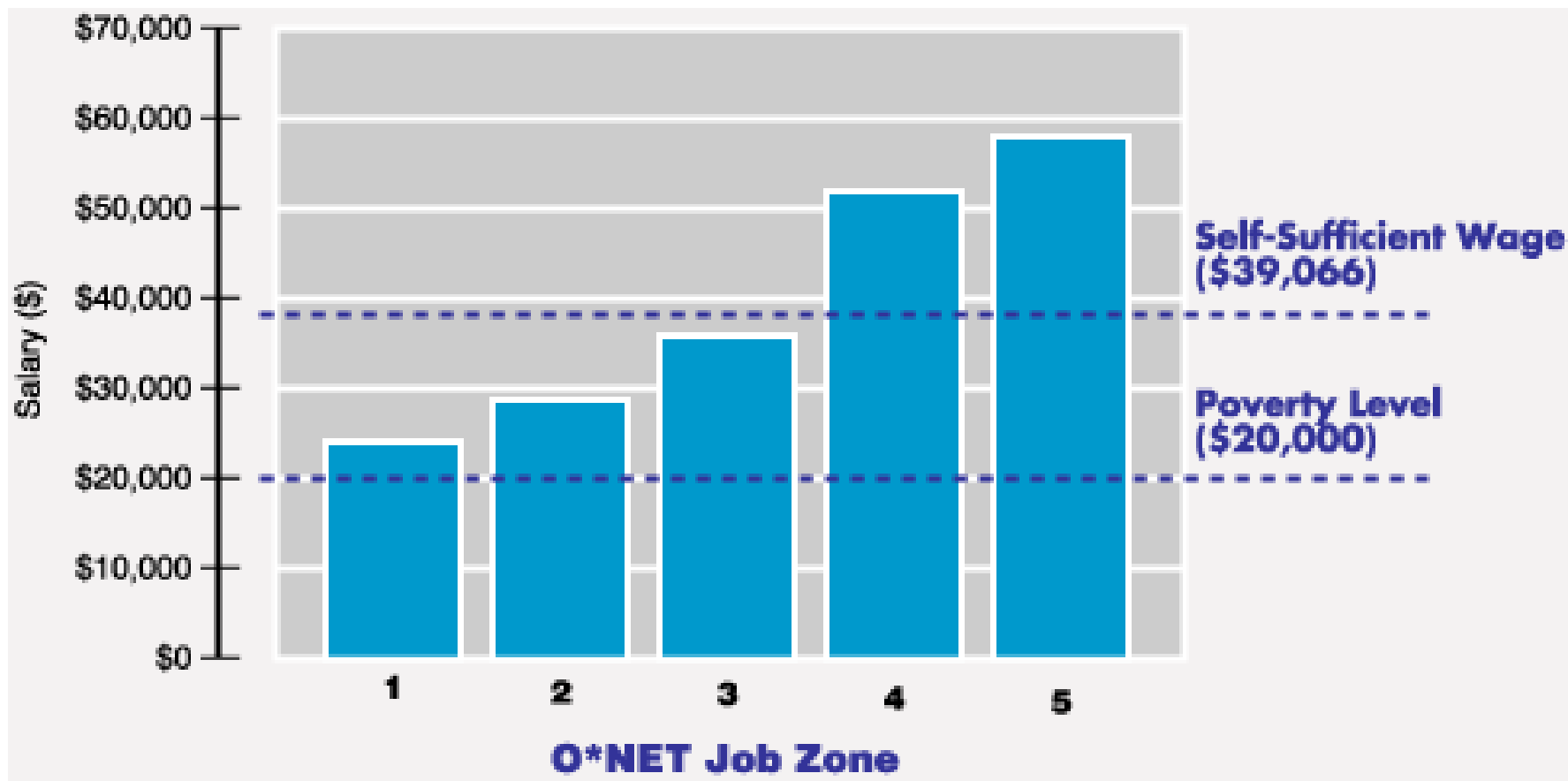
“Our education system should give every student the knowledge and skills they need to have meaningful options when they finish high school. These skills can be taught within rigorous high school classes, whether they be academic- or career-focused.”

Richard L. Ferguson,
ACT's chief executive officer

Median Annual Salary by O*NET Job Zone



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O*NET Job Zones



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- Zone 1 - May require high school diploma or GED
- Zone 2 - High school diploma and may require some vocational training or job-related course work
- Zone 3 - Training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.
- Zone 4 - Four-year bachelor's degree and/or 2-4 years of work experience
- Zone 5 - Bachelor's degree and/or graduate school plus experience

Ready for College = Ready for Workforce Training



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For the study, ACT looked at occupations classified by the Occupational Information Network (O*NET) that:

- do not require a four-year college degree
- offer the potential for career advancement
- are projected to increase in the future
- are likely to offer a wage sufficient for a family of four

Ready for College = Ready for Workforce Training



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These "Zone 3" occupations—which include electricians, construction workers, upholsterers, plumbers, etc.—typically require some combination of vocational training and on-the-job experience or an associate's degree.

Ready for College = Ready for Workforce Training



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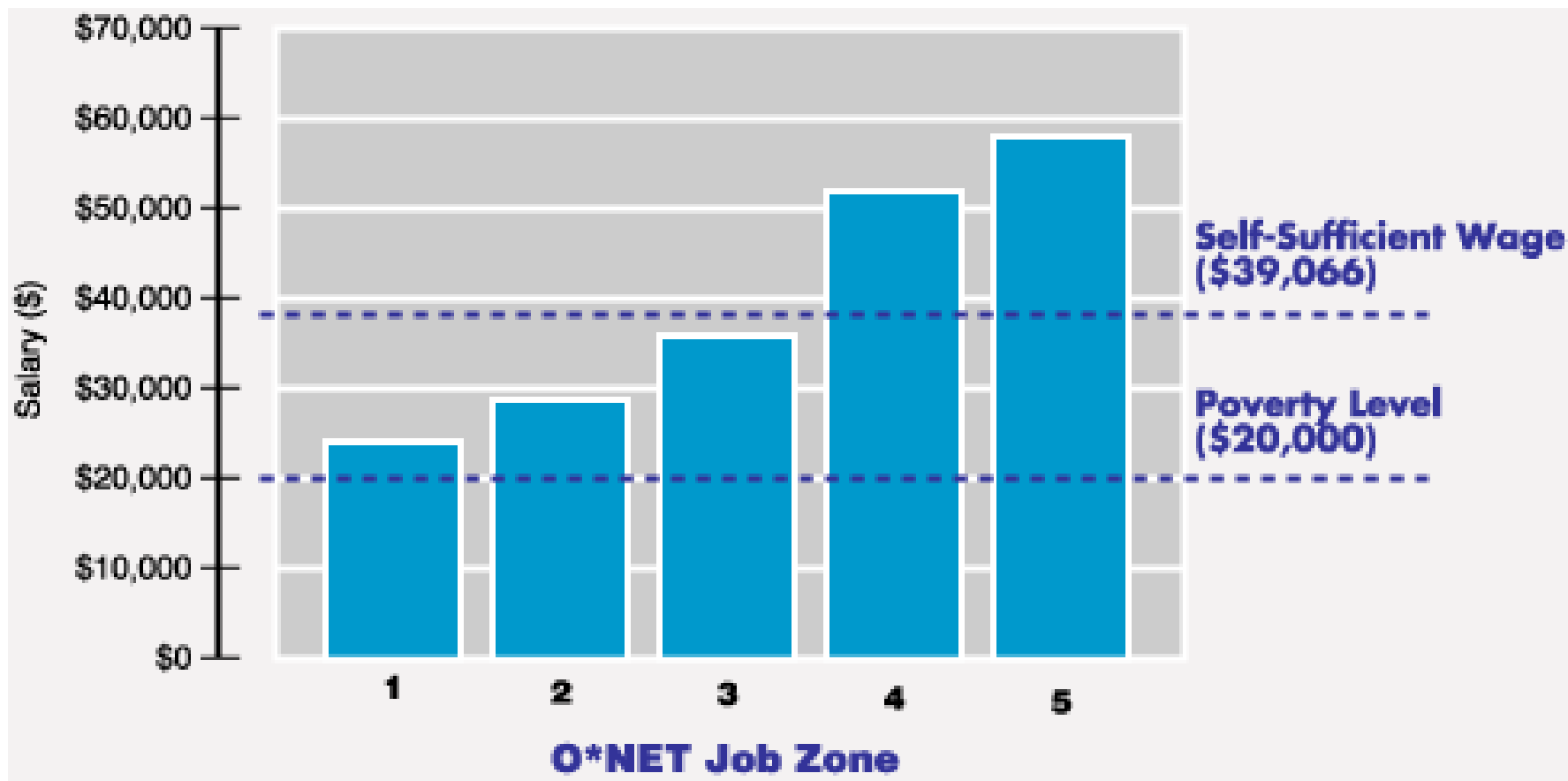
ACT found:

The levels of math and reading skills needed for success in the first year of college are comparable to those needed by high school graduates to enter the vast majority (90 percent) of the profiled Zone 3 jobs.

Median Annual Salary by O*NET Job Zone



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Ready for College = Ready for Workforce Training



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"In today's increasingly technological society, more and more jobs that offer the potential for good wages and future growth are requiring at least some type of training or education beyond high school."

Richard L. Ferguson,
ACT's chief executive officer

The report offers a number of recommendations to policymakers:



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- All students will be prepared for college and workforce training programs when they graduate from high school.
- All students take a rigorous core course program in high school.
- Hold schools and states accountable for preparing all students for college and workforce training through rigorous core courses.

The report offers a number of recommendations to policymakers:



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- State standards reflect the skills needed for college and workforce training readiness.
- Begin measuring student progress with aligned assessments as early as the eighth grade to monitor progress, make appropriate interventions, and keep score.
- Use college and workforce training readiness as a prerequisite for entry into funded training or development programs and offer remediation for those who do not meet established expectations.

What We Know



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Too many students enter high school unprepared for quality high school studies.

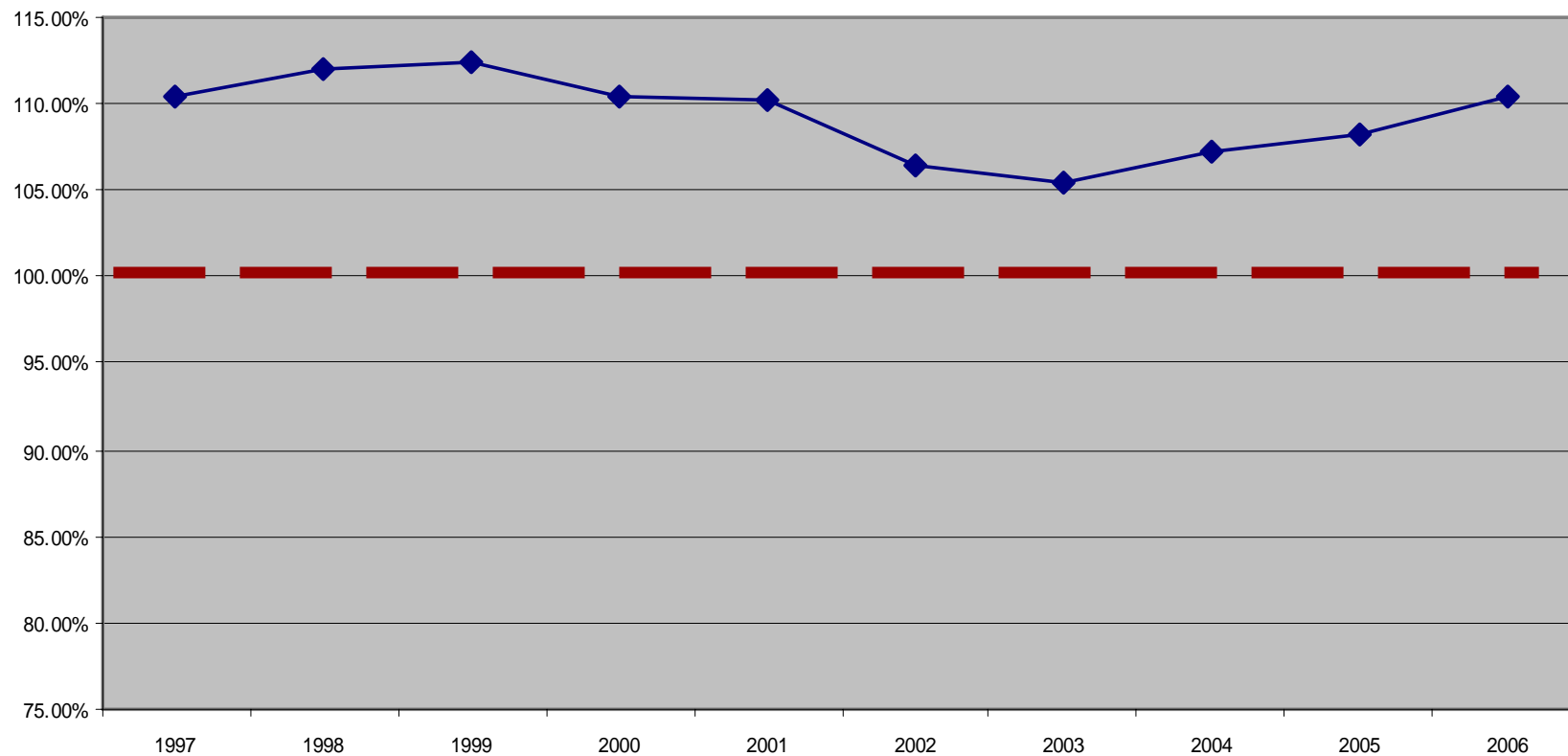
Too many students do not graduate.

Too few students are ready for college or workforce training.



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9th Grade Bulge



High School

How is Tennessee doing?

What actions are needed?

High School Completion

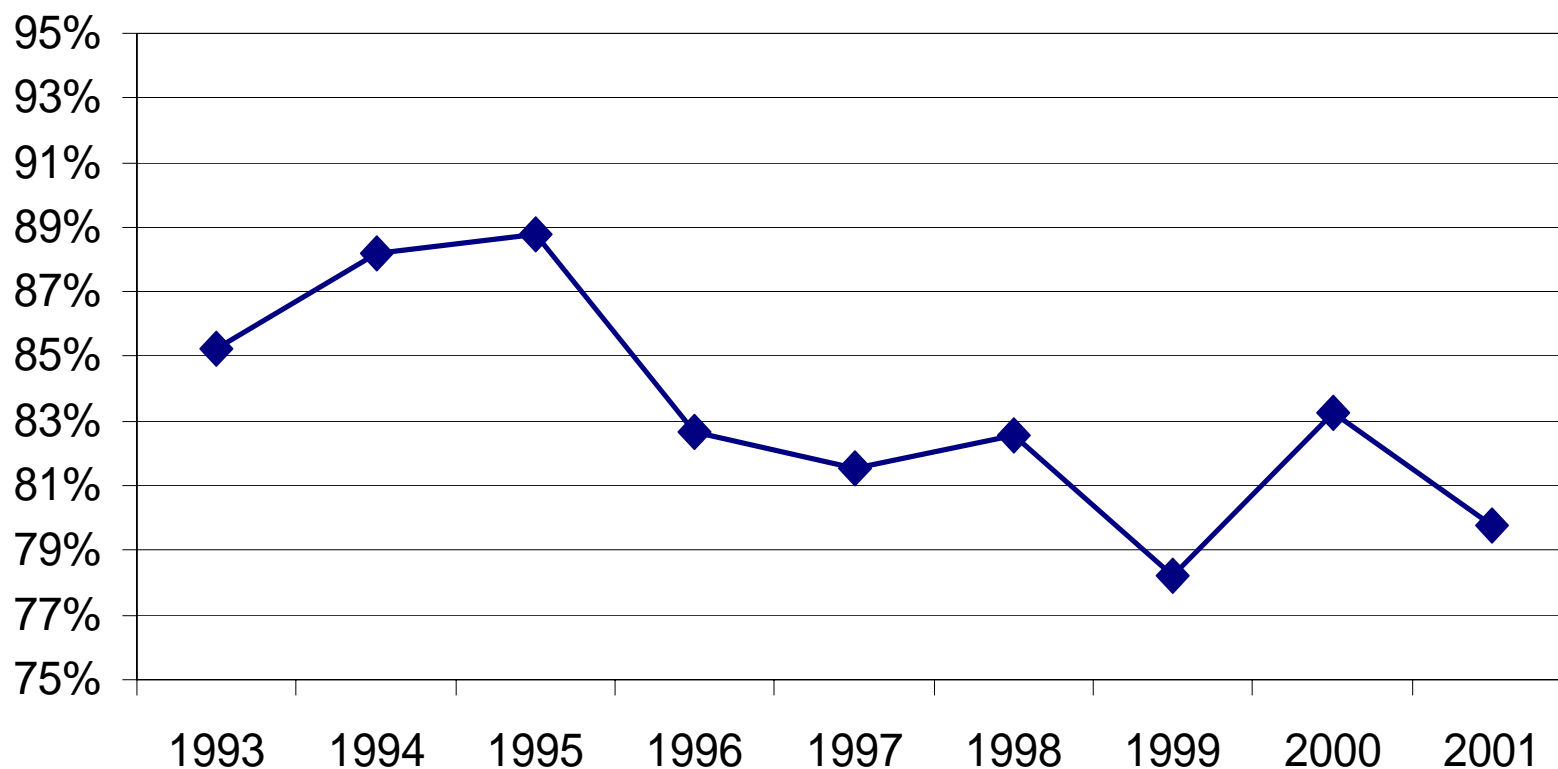


Report Card	2003	2004	2005
Tennessee	76.0%	75.7%	77.9%



High School Completion

**Percentage of Seniors Enrolled
in the Fall and Graduated On-time
(in Spring/Summer of Following Year)**



Source: Special Analyses of NCES Common Core of Data Enrollment and Graduate Reports

ACT College Readiness Benchmark Scores



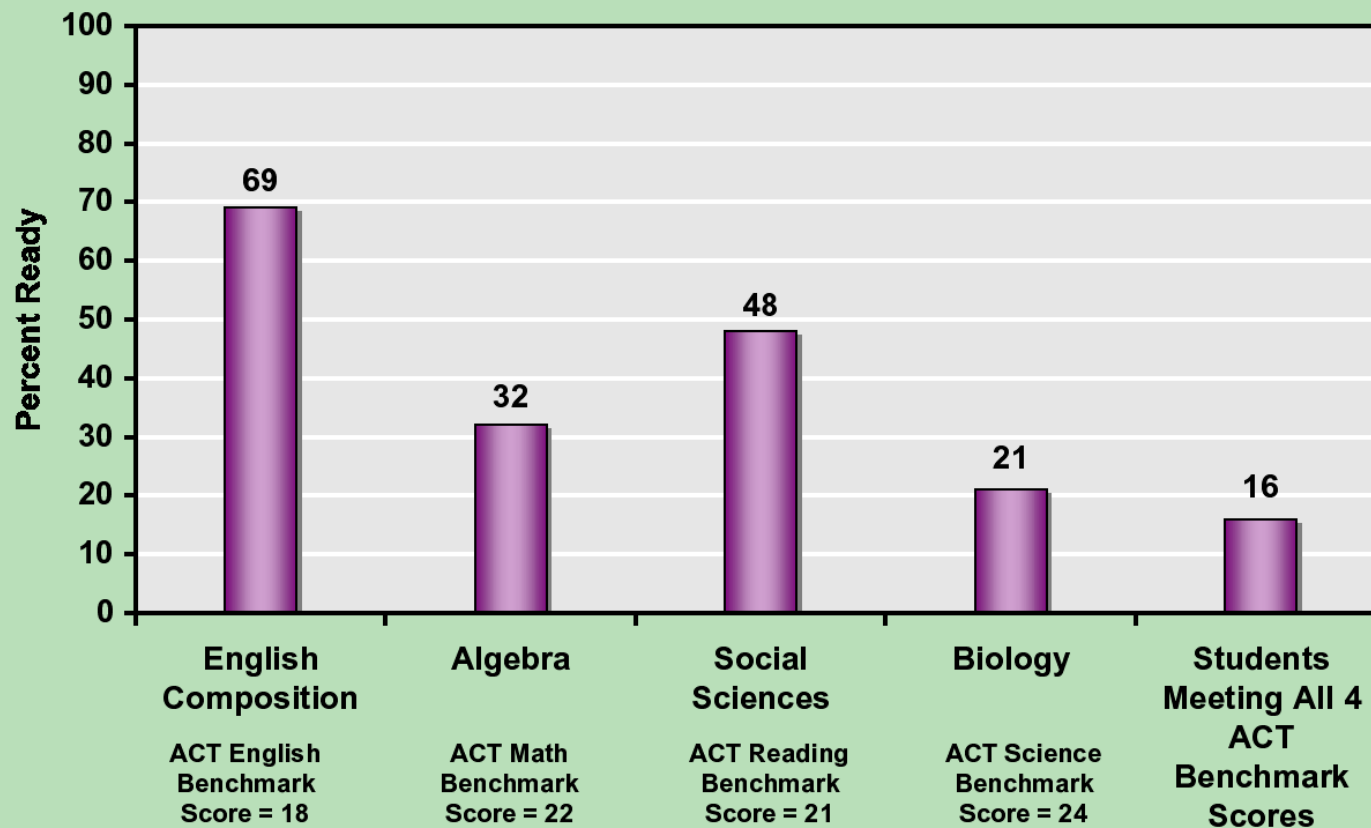
Through collaborative research with postsecondary institutions nationwide, ACT has established the following College Readiness Benchmark Scores:

ACT Subject Area Test	College Course(s)	College Readiness Benchmark Score
English	English Composition	18
Math	Algebra	22
Reading	Social Sciences	21
Science	Biology	24

- A benchmark score is the minimum score needed on an ACT subject area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college courses.

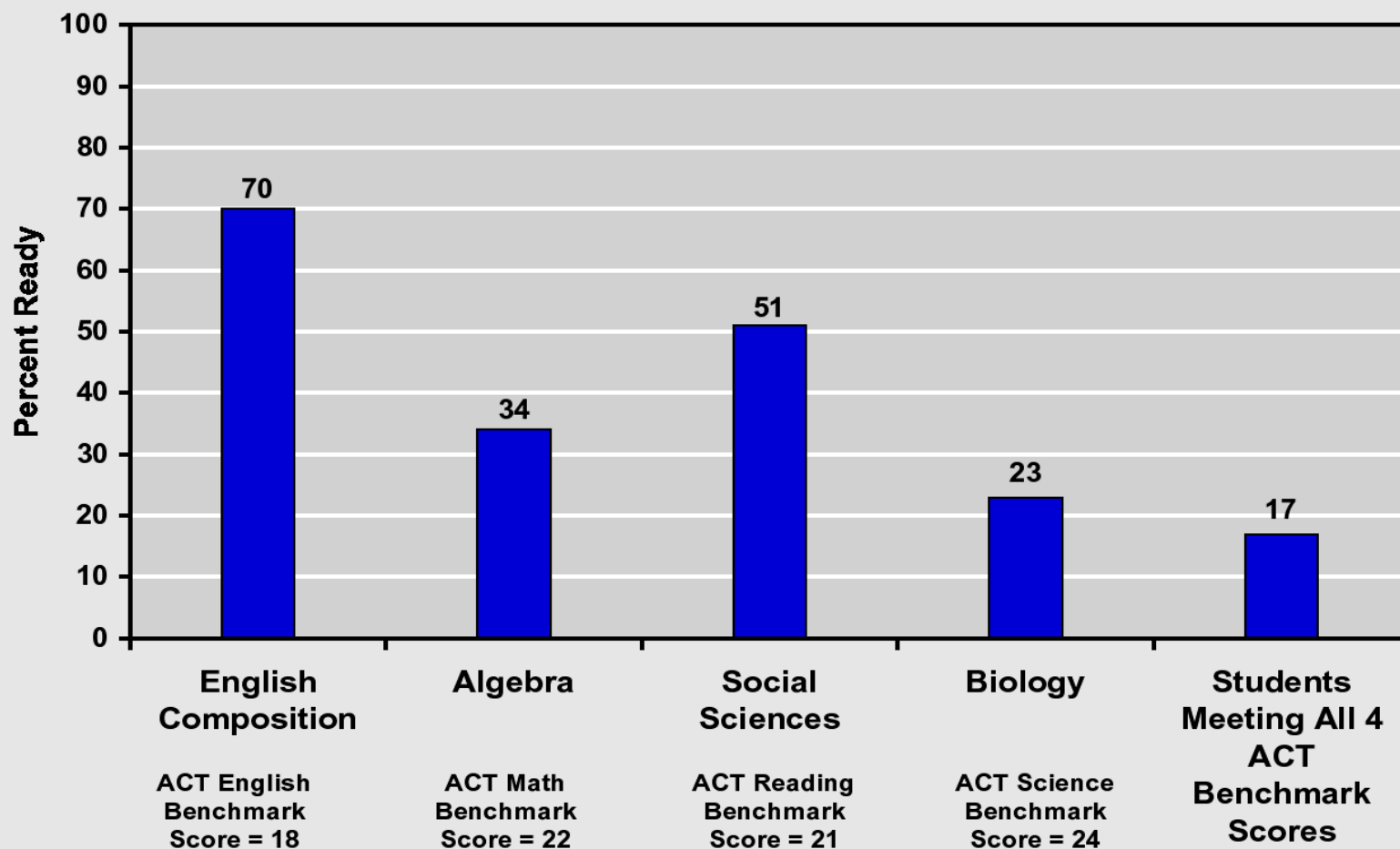


2005 Tennessee ACT-Tested Graduates Likely to Be Ready for College-Level Work (in percent)



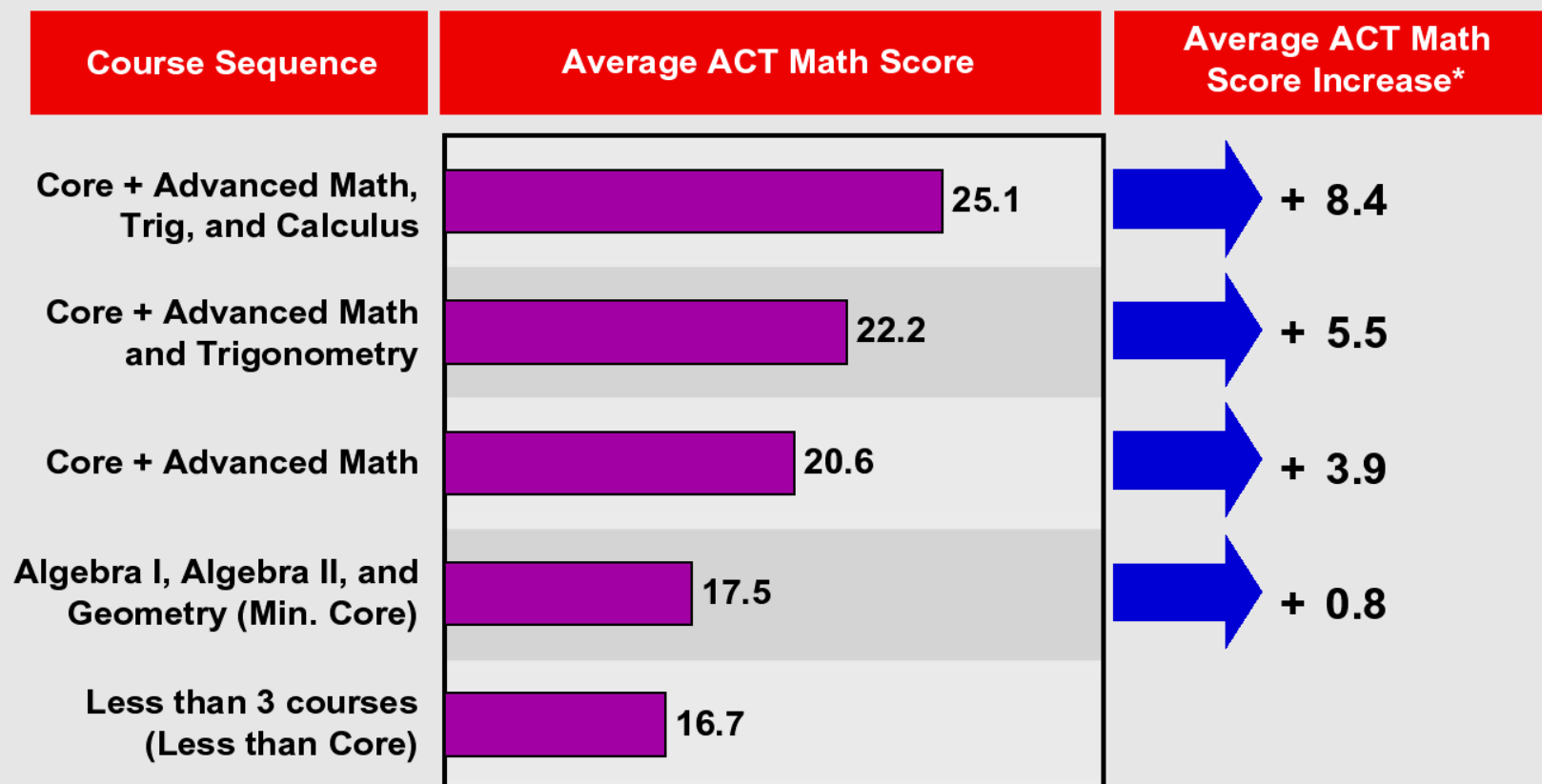


2006 Tennessee ACT-Tested Graduates Likely to Be Ready for College-Level Work (in percent)





2006 Tennessee Average ACT Mathematics Test Score Increase by High School Mathematics Course Sequence

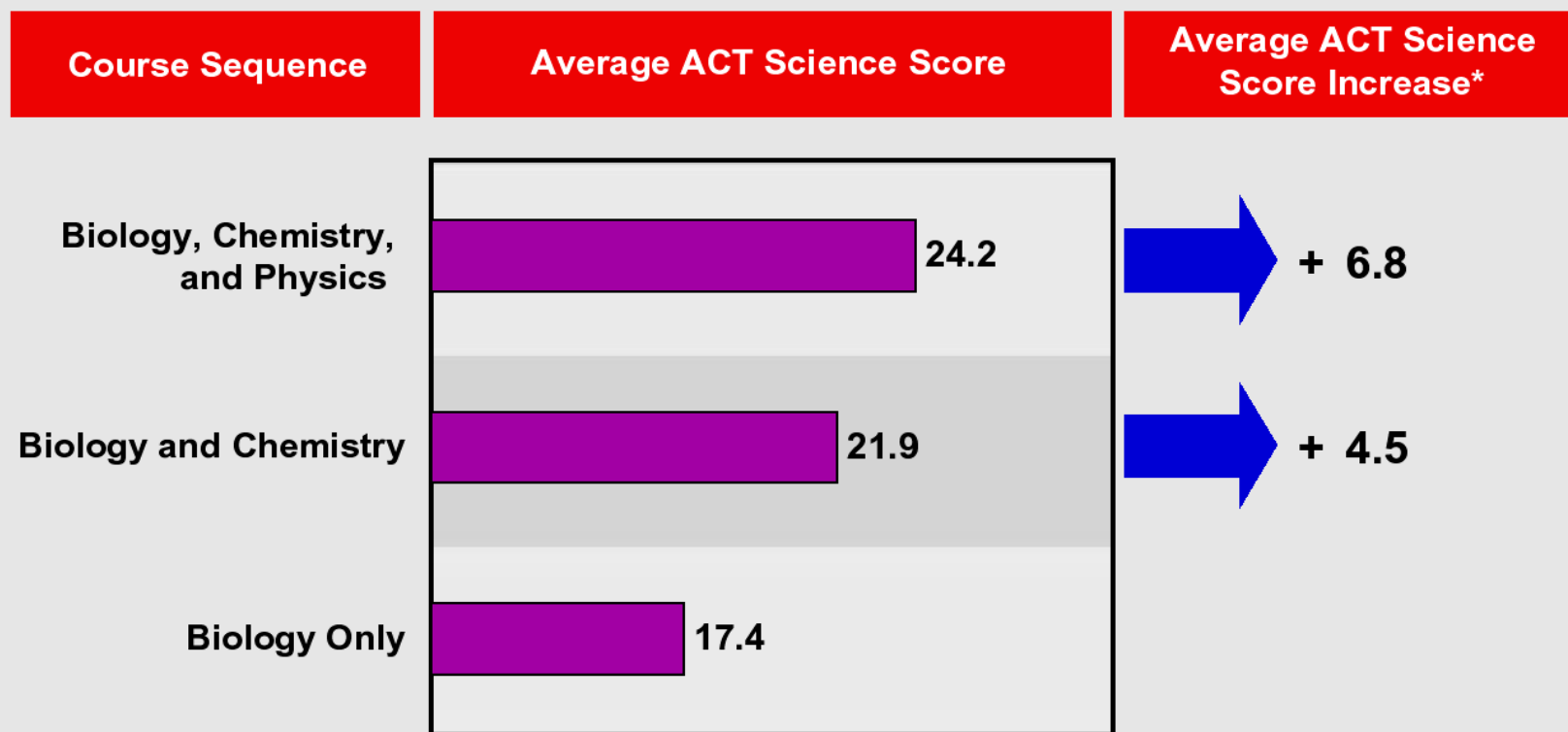


*Increase over taking less than 3 Mathematics courses.

Note: Missing data means an insufficient number of students reported taking that course sequence.



2006 Tennessee Average ACT Science Test Score Increase by High School Science Course Sequence



*Increase over taking Biology only.

Note: Missing data means an insufficient number of students reported taking that course sequence.

EXPLORE and PLAN

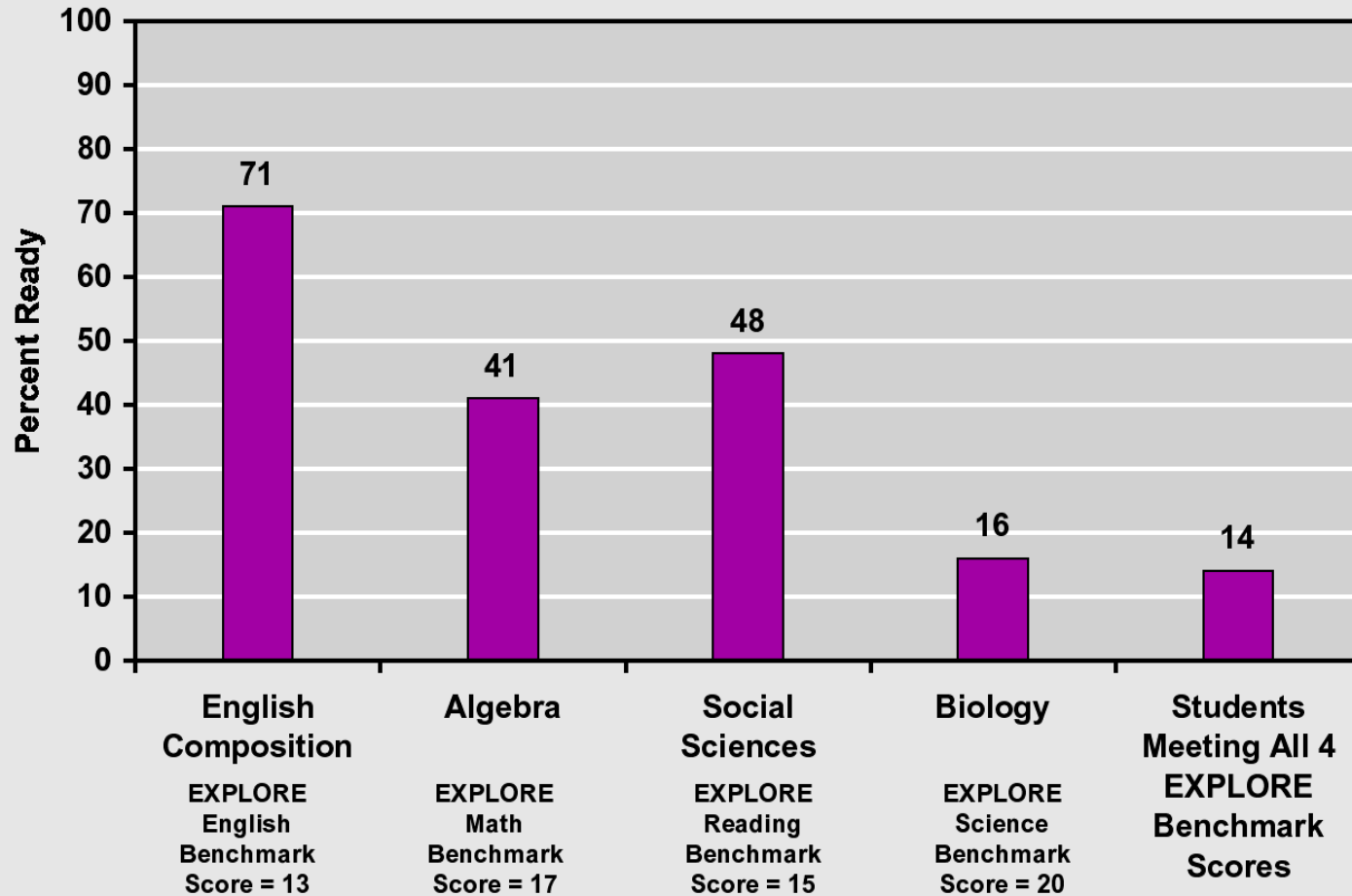
College Readiness Benchmark Scores

The EXPLORE and PLAN College Readiness Benchmark Scores are based on the ACT College Readiness Benchmark Scores. They reflect students' expected growth from EXPLORE to PLAN to the ACT and assume sustained academic effort throughout high school.

ACT Subject Area Test	College Course(s)	College Readiness Benchmark Score		
		EXPLORE	PLAN	ACT
English	English Composition	13	15	18
Math	Algebra	17	19	22
Reading	Social Sciences	15	17	21
Science	Biology	20	21	24

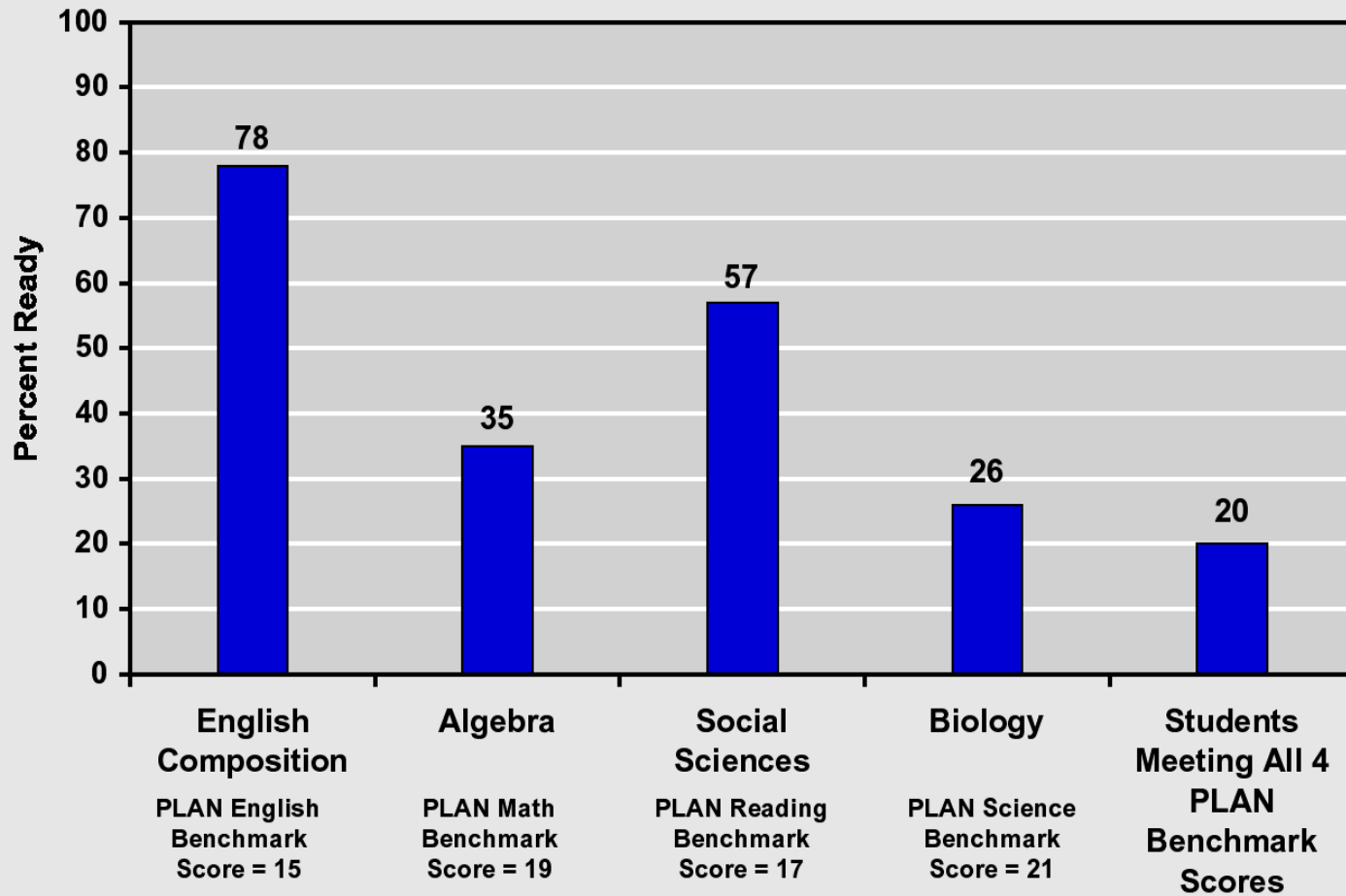
EXPLORE

2005 - 2006 Tennessee EXPLORE-Tested Students Likely to Be Ready for College-Level Work (in percent)



PLAN

2005 - 2006 Tennessee PLAN-Tested Students Likely to Be Ready for College-Level Work (in percent)



Universities



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Tennessee Board of Regents

First-time Freshmen

Enrolled in Developmental Studies Courses

Fall 2005

	Total Cohort	Developmental Studies Enrollment	
		Enrolled	% Total
Austin Peay	1,363	615	45.1%
East Tennessee State	1,595	567	35.5%
Middle Tennessee State	3,269	1,102	33.7%
Tennessee State	1,216	889	73.1%
Tennessee Tech	1,191	307	25.8%
University of Memphis	2,107	807	38.3%
Total Universities	10,741	4,287	39.9%

Community Colleges



First-time Freshmen

Chattanooga State	1,341	1,012	75.5%
Cleveland State	590	404	68.5%
Columbia State	855	585	68.4%
Dyersburg State	607	486	80.1%
Jackson State	777	601	77.3%
Motlow State	952	645	67.8%
Nashville Tech	1,027	810	78.9%
Northeast State	925	664	71.8%
Pellissippi State	1,462	915	62.6%
Roane State	1,024	715	69.8%
Southwest Tennessee	2,121	1,843	86.9%
Volunteer State	1,318	902	68.4%
Walters State	1,225	928	75.8%
Total Two-Year	14,224	10,510	73.9%



Actions for Improving the Two-Path Plan

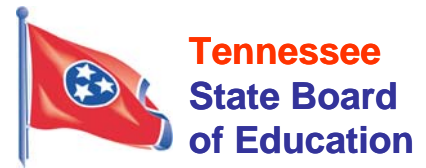
- **Defining a common rigorous academic core for all students**

- **Requiring it**

or

- **Setting yearly targets for districts and schools to meet**

Honors



**Recognize students as graduating
with HONORS who meet the ACT
Readiness Benchmarks:**

English – 18

Math – 22

Reading - 21

Science – 24

Scholastic Path

Default Path

All students enter here unless IEP exempts.

(Target = Percentage of graduates completing the Scholastic Path: 50% by 2012; 60% by 2014; 70% by 2016)

Graduation Requirements

English - 4 credits

Must be Honors, Dual Credit, AP, or IB

Math - 4 credits

Alg I, Geometry, Alg II & upper level math
or 3 years of integrated math and upper level math**.
Must take a math course each year in high school

Science - 3 credits

Biology I, Chemistry, & Physics

Social Studies - 3 credits

Am Hist, Econ, Gov, & W Hist or W Geog

Wellness - 1 credit

Physical Education - 1 credit***

Foreign Language - 2 credits in the same language

Fine Art - 1 credit

Elective Focus - 3 credits

Total = 22 credits or 2 credits less than possible

Students must pass examinations in Gateway Math, Gateway Science, and Gateway English.

Students completing the scholastic path along with the requirements below will be Tennessee Scholars and as such, eligible to receive all benefits assigned thereto:

- 1 - a computer course and a minimum of two CTE courses in the same track
- 2 - 20 hours of community service
- 3 - overall C average in all Tennessee Scholars courses
- 4 - 95 percent attendance
- 5 - no out-of-school suspensions

**** Students who have not earned a 19 on the mathematics component of the PLAN or the equivalent on the PSAT by the end of the junior year must complete the discrete math course.**

***** The physical education requirement may be met by substituting an equivalent time of physical activity in other areas including but not limited to marching band, JROTC, cheerleading, interscholastic athletics, and intramural athletics.**



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Traditional Path

Enrollment in this path requires written approval from parent, counselor, and principal.

Graduation Requirements

English - 4 credits

Math - 4 credits

Alg I *, Geometry, & at least one upper level math**

Must take a math course each year in high school

Science - 3 credits

Biology I, a physical science, & another lab science

Social Studies - 3 credits

Am Hist, Econ, Gov, & W Hist or W Geog

Wellness - 1 credit

Physical Education - 1 credit***

Fine Art - 1 credit

Electives - 2 credits

Elective Focus - 3 credits

Total = 22 credits or 2 credits less than possible

Students must pass examinations in Gateway Math, Gateway Science, and Gateway English.

Students completing this path planning to seek admission to a university or community college should:

1 - complete 2 credits in the same foreign language

2 - complete the admission math requirement

* A two unit Algebra I equivalent may be counted for two of the four (4) required math units.

** Students who have not earned a 19 on the mathematics component of the PLAN or the equivalent on the PSAT by the end of the junior year must complete the discrete math course.

*** The physical education requirement may be met by substituting an equivalent time of physical activity in other areas including but not limited to marching band, JROTC, cheerleading, interscholastic athletics, and intramural athletics.

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